



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/653,827	09/01/2000	Glenn D. Rasmussen	240703-1110	6068
23506	7590	10/05/2005	EXAMINER	
GARDNER GROFF, P.C. 2018 POWERS FERRY ROAD SUITE 800 ATLANTA, GA 30339			TO, BAOQUOC N	
			ART UNIT	PAPER NUMBER
			2162	

DATE MAILED: 10/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/653,827

Applicant(s)

RASMUSSEN, GLENN D.

Examiner

Baoquoc N. To

Art Unit

2162

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-44 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

AT

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 07/25/2005 has been entered.

Claims 1-44 are pending in this application.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 9 and 36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 9 recites "that" in line 2 and claim 36 recites "that" in line 1. Pronouns are not permitted, only what being referred by "that" should be set forth in the claim. Applicants are advised to amend the claim to solve the 112 rejection as set forth in the claim.

Claims 9-34 and 36-42 are depended on claims 9 and 36; therefore, they are rejected under the same reason as to claims 9 and 36.

### ***Response to Arguments***

Art Unit: 2162

3. Applicant's arguments filed 07/25/2005 have been fully considered but they are not persuasive.

Applicant argues "Mullins does not disclosure any metadata model having multiple layers containing model objects of different degrees of abstraction."

The examiner respectfully disagrees with the applicant argument. As Mullins discloses "the subject invention includes the usage of metadata 201 (i.e. data used to describe other data how to access and convert non-object data store content 304 back forth and back" (col. 4, lines 33-37). In addition, the usage of metadata 201 to generate one or more commands 303 for accessing the data (col. 5, lines 40-43). This suggests the recited "whereby the model objects in the higher layer provide a presentation of the business concept."

The applicant also argues "Baisley does not teach any means for abstracting the information by adding the business intelligence, or for creating additional objects in the same model so that objects in a higher layer provides a representation of business concept."

The examiner respectfully disagrees with the above argument. As previously discuss Baisley discloses the transforming of MOF to UML using the rule (col. 3, lines 37-54). Rule of Baisley is the business rule because the rule converts application for business usage.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2162

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-8, 35 and 43-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mullins (US. Patent No. 5,857,197) in view of Baisley et al. (US. Patent No. 6,292,932 B1).

Regarding on claim 1, 35 and 43-44, Mullins teaches metadata model transformer for transforming a metadata model, the transformer comprising:

a lower-to-higher transformation having:

means for obtaining information of a lower abstraction model object in the lower layer of a metadata model having a lower layer containing one or more lower degree of abstraction model objects having and a higher layer containing one or more higher abstraction model objects having a higher abstraction (col. 4, lines 33-67); and

means for creating a model object in the higher layer a higher corresponding to the model object in the lower layer based on the information abstracted by the means for abstracting, whereby the model objects in the higher layer provide a presentation of the business concept (col. 4, lines 33-67 and col. 5, lines 40-43).

Mullins does not explicitly teach means for abstracting the information by adding business rules for representing a business concept. However, Baisley teaches "UML may be used to model metamodels, which will later need to be translated into MOF metamodels. The present invention provides a set of rules for making such a transformation" (col. 3, lines 25-28). This suggests the transforming of metamodels utilizing transformation rules. Therefore, it would have been obvious to one ordinary

Art Unit: 2162

skill in the art at the time of the invention was made to modify Mullins system to include the transformation rules in order to provide the transformation rules to transform a metadata model as taught by Baisley in order to provide a model that allows application to be processed according to user input.

Regarding on claim 2, Mullins teaches metadata model transformer comprising:

a lower layer transformation having:

means for obtaining information from model object in the lower layer (col. 4, lines 33-67);

means for modifying the obtained information (col. 4, lines 33-67); and

means for transforming the model object in a lower layer based on the modified information (col. 4, lines 33-67).

Regarding on claim 3, Mullins teaches metadata model transformer comprising:

a lower layer transformation having:

means for obtaining information from a model objects in the lower layer (col. 4, lines 33-66);

means for determining a specific feature included in the obtained information (col. 4, line 33-66); and

means for creating a new model object based in the lower layer on the specific feature (col. 4, lines 33-66).

Regarding on claim 4, Mullins teaches metadata model transformer comprising:

a lower layer transformation having:

means for obtaining relationship information between multiple model objects in

the lower layer (col. 4, lines 33-66); and

means for creating a new model object in the higher layer based on the relationship information (col. 4, lines 33-66).

Regarding on claim 5, Mullins teaches metadata model transformer as claimed in claim 1 further comprising:

a higher layer transformation having:

means for obtaining information of a model object in the higher layer (col. 4, lines 44-66)-,

means for modifying the obtained information (col. 4, lines 33-66)., and

Means for transforming the higher abstraction model object based on the modified information (col. 4, lines 33-66).

Regarding on claim 6, Mullins teach metadata model transformer as claimed in claim 1 further comprising:

a higher layer transformation having:

means for obtaining information of a higher abstraction model objects from the higher layer (col. 4, lines 33-66);

means for determining a specific feature included in the obtained information (col. 4, lines 33-66); and

means for creating a new higher abstraction model object based on the specific feature (col. 4, lines 33-66).

Regarding on claim 7, Mullins teaches a metadata model transformer further comprising:

Art Unit: 2162

a higher layer transformation having:

means for obtaining relationship information between multiple higher abstraction model objects from the higher layer (col. 4, lines 33-66);and

means for creating a new higher abstraction model object based on the relationship information (col. 4, lines 33-66).

Regarding on claim 8, Mullins teach a metadata model transformer further comprising:

a higher layer transformation having:

means for selecting a subset of the higher abstraction model objects from the higher layer (col. 4, lines 33-66); and

means for creating a new higher abstraction model object based on the selected subset of the higher abstraction model objects (col. 4, lines 33-66),

### ***Conclusion***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Baoquoc N. To whose telephone number is at 571-272-4041 or via e-mail BaoquocN.To@uspto.gov. The examiner can normally be reached on Monday-Friday: 8:00 AM – 4:30 PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached at 571-272-4107.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks  
Washington, D.C. 20231.



Art Unit: 2162


The fax numbers for the organization where this application or proceeding is assigned are as follow:

(571) -273-8300

[Official Communication]

BQ To

Nov 1st, 2005



JEAN M. CORRIELUS  
PRIMARY EXAMINER